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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Patent Application of

CHARNOCK et al

Serial No. 09/787,011

Filed: March 12, 2001

For: ION-EXCHANGE POLYMERS

Atty. Ref.: 687-93

Group: 1711

Examiner:

\* \* \* \* \*

December 13, 2002

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the references listed on the attached form PTO-1449, a copy of each of which is enclosed. This is not to be construed as a representation that a search has been made or that no better prior art exists, or that a reference is relevant merely because cited.

The Examiner is requested to initial the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

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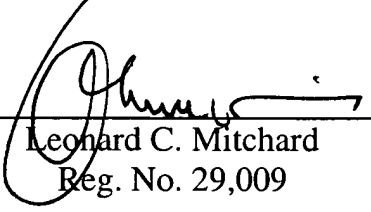
TC 1700

Pursuant to Rule 37 C.F.R. §1.97(c), a fee of \$180.00 as specified in Rule 17(p) is attached. If there is any shortage in the fee, please charge the deposit account of Nixon & Vanderhye, Account No. 14-1140.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_

  
Leonard C. Mitchard  
Reg. No. 29,009

LCM:lfm  
1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

INFORMATION DISCLOSURE  
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ATTY. DOCKET NO.

SERIAL NO.

687-93

09/787,011

APPLICANT

CHARNOCK et al

FILING DATE

GROUP

March 12, 2001

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(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

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## OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

	Wang et al; "Sodium sulfonate-functionalized poly(ether ether ketone)s"; Macromol. Chem. Phys. 199, pp. 1421-1426 (1998).
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	Lloyd et al and Wightman et al; "Poly(aryl ether) Membranes for Reverse Osmosis"; ACS Symposium Series 153, Synthetic Membranes: Vol. 1, Desalination, pp. 326-349. (1981).
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	Shobha, et al; "Synthesis and Characterization of Sulfonated Poly(Arylene Ether)s Based on Functionalized Triphenyl Phosphine Oxide for Proton Exchange Membranes"; Polymer Preprints 2000, 41(1), pp. 180-181; and pp. 236-239.
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	Ueda et al; "Synthesis and Characterization of Aromatic Poly (ether Sulfone)s Containing Pendant Sodium Sulfonate Groups"; Journal of Polymer Science, Part A: Polymer Chemistry, Vol. 31, pp. 853-859 (1993).

\*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.